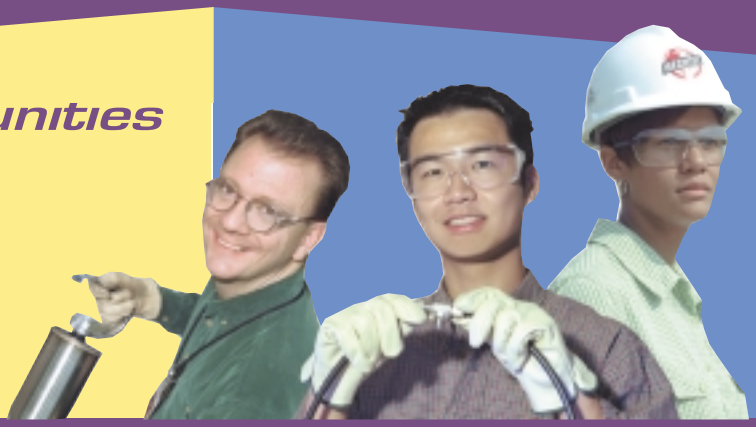
real-work opportunities

Defense Programs

at the Savannah River Site



a member of the Westinghouse Savannah River Company Team

The SRS Tritium Facilities were built to process tritium, a gas that is a vital component of nuclear weapons. Tritium must be replenished continually because it decays at a rate of 5.5 percent a year. All tritium reservoir loading and recycling work, which supports the nation's nuclear weapons stockpile, is conducted at SRS.

With nearly $550M in new projects under way, a high priority is given to the careful integration of projects with the existing production missions.

The facility sets records in waste gas cleanup capability by integrating process chemistry technology and state of the art controls systems.

With $5 million in state-of-the-art hardware, system engineers and software designers are working process and operation automation improvements.

Engineering efforts are under way to modernize the reservoir finishing facility. New technology employed in this effort includes digital radiography, laser and optical coordinate measurement and computer automation.

Advances in process chemistry, research and development have yielded exciting new gas processing technology and equipment. For example, a new method to convert tritium water molecules into their element constituents with no residual waste will be installed in fiscal year 2001.

The Defense Program Division, which operates the SRS Tritium Facilities, offers many career-developing opportunities for many engineering disciplines, including chemical, mechanical and electrical engineers. The division provides extensive job and facility-specific training, as well as mentoring to enable the new engineer to become familiar with division and site practices.

Operating a modern gas processing facility requires employees to engage in critical analysis and possess problem-solving capabilities. We work with the country's weapons design laboratory to ensure that weapon component specifications are integrated into the processing facilities. We provide engineering support for the operation of a complex chemical processing facility, requiring unique skills in chemical, mechanical and electrical engineering.

Additional challenges include working toward feasible new methods for gas isotope separation and purification; engineering involvement in research and development of final process selection and design; developing innovative techniques to improve safety in a state of the art facility; and designing the new $450 million Tritium Extraction Facility. DP Engineering is a high-tech team of problem-solving individuals. We provide engineering oversight for process equipment to insure optimal performance. We interact with Operations and Maintenance staff to resolve real-time problems. And we provide technical reviews of design changes using codes, standards and system cognizance to ensure process modifications are sound.

Defense Program engineers work with systems such as one-of-a-kind state of the art chemical process equipment; computer control and instrumentation; electrical distribution and electronic equipment; and special design weapon component interface equipment.

For more information about Defense Programs, please contact Jim Dollar, Deputy Chief Engineer, at (803) 208-1806, or at james.dollar@srs.gov.

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Westinghouse Savannah River Company

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